SEQUENCE LISTING

<110> Dolly, James Oliver
O'Sullivan, Gregory A.
Mohammed, Nadiem
Foran, Patrick G.

<120> Isoforms of SNARE Molecules and the Uses Thereof in Modulation of Cellular Exocytosis Methods of Treatment

<130> 17790 (BOT)

<140> 10/049,967
<141> 2004-02-23

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<220>
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<220>
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<210> 25
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<220>
<223> Peptide

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Gln Thr Ala Thr Lys Met
1 5

<210> 26
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<212> PRT
<213> Artificial Sequence

<220>
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<400> 26
Gln Arg Ala Thr Lys

1 5

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<220>
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Gln Thr Ala Thr Lys
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1 5 10

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<400> 32
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ccccctggcc ctcctcctaa catgaccagt aacagacgac tacagcaaac ccaggcacaa 120
gtggaggagg tggtggacat catacgtgtg aacgtggaca aggtcctgga gagggaccag 180
aagctgtcag agctggatga ccgagctgat gccttgcagg caggagcatc acaatttgag 240
agcagtgctg caaagctaaa gaggaagtat tggtggaaaa actgcaagat gatgatcatg 300
ctgggaacca tctgtgccat catcgtggta gttattgtaa tctacttttt tact   354

<210> 34
<211> 118
<212> PRT
<213> Homo sapiens

<400> 34
Met Ser Ala Pro Ala Gln Pro Pro Ala Glu Gly Thr Glu Gly Thr Ala
 1   5   10   15
Pro Gly Gly Gly Pro Pro Gly Pro Pro Pro Asn Met Thr Ser Asn Arg
            20   25   30
Arg Leu Gln Gln Thr Gln Ala Gln Val Glu Glu Val Val Asp Ile Ile
        35   40   45

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Arg Val Asn Val Asp Lys Val Leu Glu Arg Asp Gln Lys Leu Ser Glu
    50                  55                  60
Leu Asp Asp Arg Ala Asp Ala Leu Gln Ala Gly Ala Ser Gln Phe Glu
65                  70                  75                  80
Ser Ser Ala Ala Lys Leu Lys Arg Lys Tyr Trp Trp Lys Asn Cys Lys
                85                  90                  95
Met Met Ile Met Leu Gly Thr Ile Cys Ala Ile Ile Val Val Val Ile
            100                 105                 110
Val Ile Tyr Phe Phe Thr
        115
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<213> Homo sapiens

<220>
<221> allele
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<400> 35
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cctccaaacc tcaccagtaa caggagactg cagcagaccc aggcccaggt ggatgaggtg 180
gtggacatca tgagggtgaa cgtggacaag gtcctggagc gagaccagaa gctgtcggag 240
ctggacgacc gtgcagatgc actccaggcg ggggcctccc agtttgaaac aagcgcagcc 300
aagctcaagc gcaaatactg gtggaaaaac ctcaagatga tgatcatctt gggagtgatt 360
tgcgccatca tcctcatcat catcatagtt tacttcagca cttaaatccc cgaggagtct 420
gccctgccta gagaagggcc tctcccccaa ccctcagccg ttcctccacc tctcagccat 480
atctntcagc ccccctc   498

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<212> DNA
<213> Homo sapiens

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ccgccgtcgc cgtcactgcc tctgccaagt ccactgcccg ctacccccgc catgtcggct 120
accgctgcca ccgtcccgcc tgccgccccg gccggcgagg gtggcccccc tgcacctcct 180
ccaaacctta ctagtaacag gagactgcag cagacccagg cccaggtgga tgaggtgagt 240
gtgtgtgtgt gtctgtgtct gtgtctatgt ctatgtatgt caaagatgca agatgatggg 300
ctggcaaata ggtgtgggag cccatcttgg gttgaaggta aagacagctt atgcttgtgg 360
gttttggtcg gagacctgcc tcat   384

<210> 37
<211> 638
<212> DNA
<213> Homo sapiens

<400> 37

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cgaagacttc agcagacaca aaatcaagta gatgaggtgg tggacataat gcgagttaac 120
gtggacaagg ttctggaaag agaccagaag ctctctgagt tagacgaccg tgcagacgca 180
ctgcaggcag gcgcttctca atttgaaacg agcgcagcca agttgaagag gaaatattgg 240
tggaagaatt gcaagatgtg ggcaatcggg attactgttc tggttatctt catcatcatc 300
atcatcgtgt gggttgtctc ttcatgaaga accagcggaa ctcaaaactg ctgttcaaga 360
aacctcttca agacttttga cttagaacct gctatattat caagcttacc tactgttatc 420
tctaaaattt tttttgtgtt aatgtaaagt tgaatttcta ggaaacgtgc ctttgttttt 480
taatatgcac tccaaattag aaggccggcc ccgtccacat tttgcacagt gccctttacag 540
atttacgtat gggctgatga agaggccttc ttaagttcca gagtgctata atctagatgt 600
aatgttgtca ctaattaatt gccattactc ccctttag                          638

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<211> 100
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<213> Homo sapiens

<400> 38
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Gln Thr Gln Asn Gln Val Asp Glu Val Val Asp Ile Met Arg Val Asn
            20                  25                  30
Val Asp Lys Val Leu Glu Arg Asp Gln Lys Leu Ser Glu Leu Asp Asp
        35                  40                  45
Arg Ala Asp Ala Leu Gln Ala Gly Ala Ser Gln Phe Glu Thr Ser Ala
    50                  55                  60
Ala Lys Leu Lys Arg Lys Tyr Trp Trp Lys Asn Cys Lys Met Trp Ala
65                  70                  75                  80
Ile Gly Ile Thr Val Leu Val Ile Phe Ile Ile Ile Ile Ile Val Trp
                85                  90                  95
Val Val Ser Ser
            100


<210> 39
<211> 800
<212> DNA
<213> Homo sapiens

<400> 39
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agtggcctcg cccgcttgag ttttgattca tcatggataa tctgtcatca gaagaaattc 120
aacagagagc tcaccagatt actgatgagt ctctggaaag tacgaggaga atcctgggtt 180
tagccattga gtctcaggat gcaggaatca agaccatcac tatgctggat gaacaaaagg 240
aacaactaaa ccgcatagaa gaaggcttgg accaaataaa taaggacatg agagagacag 300
agaagacttt aacagaactc aacaaatgct gtggcctttg tgtctgccca tgtaatagaa 360
caaagaactt tgagtctggc aaggcttata agacaacatg gggagatggt ggagaaaact 420
caccttgcaa tgtagtatct aaacagccag gcccggtgac aaatggtcag cttcagcaac 480
caacaacagg agcagtcagt ggtggataca ttaaacgcat aactaatgat gccagagaag 540
atgaaatgga agagaacctg actcaagtgg gcagtatcct gggaaatcta aaagacatgg 600
ccctgaacat aggcaatgag attgatgctc aaaatccaca aataaaacga atcacagaca 660
aggctgacac caacagagat cgtattgata ttgccaatgc cagagcaaag aaactcattg 720
acagctaaag ctactgctgt tcttctttat catttattca cttccgtagc tcctccttga 780
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aagttattac cttttcagag 800

<210> 40
<211> 211
<212> PRT
<213> Homo sapiens

<400> 40
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1 5 10 15
Thr Asp Glu Ser Leu Glu Ser Thr Arg Arg Ile Leu Gly Leu Ala Ile
20 25 30
Glu Ser Gln Asp Ala Gly Ile Lys Thr Ile Thr Met Leu Asp Glu Gln
35 40 45
Lys Glu Gln Leu Asn Arg Ile Glu Glu Gly Leu Asp Gln Ile Asn Lys
50 55 60
Asp Met Arg Glu Thr Glu Lys Thr Leu Thr Glu Leu Asn Lys Cys Cys
65 70 75 80
Gly Leu Cys Val Cys Pro Cys Asn Arg Thr Lys Asn Phe Glu Ser Gly
85 90 95
Lys Ala Tyr Lys Thr Thr Trp Gly Asp Gly Gly Glu Asn Ser Pro Cys
100 105 110
Asn Val Val Ser Lys Gln Pro Gly Pro Val Thr Asn Gly Gln Leu Gln
115 120 125
Gln Pro Thr Thr Gly Ala Val Ser Gly Gly Tyr Ile Lys Arg Ile Thr
130 135 140
Asn Asp Ala Arg Glu Asp Glu Met Glu Glu Asn Leu Thr Gln Val Gly
145 150 155 160
Ser Ile Leu Gly Asn Leu Lys Asp Met Ala Leu Asn Ile Gly Asn Glu
165 170 175
Ile Asp Ala Gln Asn Pro Gln Ile Lys Arg Ile Thr Asp Lys Ala Asp
180 185 190
Thr Asn Arg Asp Arg Ile Asp Ile Ala Asn Ala Arg Ala Lys Lys Leu
195 200 205
Ile Asp Ser
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<210> 41
<211> 923
<212> DNA
<213> Homo sapiens

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ggaggagatg cagcgaaggg ctgaccagtt ggctgatgag tcgctggaaa gcacccgtcg 180
tatgctgcaa ctggttgaag agagtaaaga tgctggtatc aggactttgg ttatgttgga 240
tgaacaagga gaacaactcg atcgtgtcga agaaggcatg aaccatatca accaagacat 300
gaaggaggct gagaaaaatt taaaagattt agggaaatgc tgtggccttt tcatatgtcc 360
ttgtaacaag cttaaatcaa gtgatgctta caaaaaagcc tggggcaata atcaggatgg 420
agtggtggcc agccagcctg ctcgtgtagt ggacgaacgg gagcagatgg ccatcagtgg 480
cggcttcatc cgcagggtaa caaatgatgc ccgagaaaat gaaatggatg aaaacctaga 540

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cgatacacag aatcgccaga tcgacaggat catggagaag gctgattcca acaaaaccag 660
aattgatgag gccaaccaac gtgcaacaaa gatgctggga agtggttaag tgtgcccacc 720
cgtgttctcc tccaaatgct gtcgggcaag atagctcctt catgcttttc tcatggtatt 780
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tgtcatctgt cagcttccca acaatacttt gtgtcttttg ttctctcttg gtctctttct 900
ttccaaaggt tgtacatagt ggt                                        923

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<211> 206
<212> PRT
<213> Homo sapiens

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Arg Ala Asp Gln Leu Ala Asp Glu Ser Leu Glu Ser Thr Arg Arg Met
            20                  25                  30
Leu Gln Leu Val Glu Glu Ser Lys Asp Ala Gly Ile Arg Thr Leu Val
        35                  40                  45
Met Leu Asp Glu Gln Gly Glu Gln Leu Asp Arg Val Glu Glu Gly Met
    50                  55                  60
Asn His Ile Asn Gln Asp Met Lys Glu Ala Glu Lys Asn Leu Lys Asp
65                  70                  75                  80
Leu Gly Lys Cys Cys Gly Leu Phe Ile Cys Pro Cys Asn Lys Leu Lys
                85                  90                  95
Ser Ser Asp Ala Tyr Lys Lys Ala Trp Gly Asn Asn Gln Asp Gly Val
            100                 105                 110
Val Ala Ser Gln Pro Ala Arg Val Val Asp Glu Arg Glu Gln Met Ala
        115                 120                 125
Ile Ser Gly Gly Phe Ile Arg Arg Val Thr Asn Asp Ala Arg Glu Asn
    130                 135                 140
Glu Met Asp Glu Asn Leu Glu Gln Val Ser Gly Ile Ile Gly Asn Leu
145                 150                 155                 160
Arg His Met Ala Leu Asp Met Gly Asn Glu Ile Asp Thr Gln Asn Arg
                165                 170                 175
Gln Ile Asp Arg Ile Met Glu Lys Ala Asp Ser Asn Lys Thr Arg Ile
            180                 185                 190
Asp Glu Ala Asn Gln Arg Ala Thr Lys Met Leu Gly Ser Gly
        195                 200                 205


<210> 43
<211> 923
<212> DNA
<213> Homo sapiens

<400> 43
aacacaaccc tcccgagaag cccaggtcca gagccaaacc cgtcactgac cccccagccc 60
aggcgcccag ccactcccca ccgctaccat ggccgaagac gcagacatgc gcaatgagct 120
ggaggagatg cagcgaaggg ctgaccagtt ggctgatgag tcgctggaaa gcacccgtcg 180
tatgctgcaa ctggttgaag agagtaaaga tgctggtatc aggactttgg ttatgttgga 240
tgaacaagga gaacaactgg aacgcattga ggaagggatg gaccaaatca ataaggacat 300
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gaaagaagca gaaaagaatt tgacggacct aggaaaattc tgcgggcttt gtgtgtgtcc 360
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agtggtggcc agccagcctg ctcgtgtagt ggacgaacgg gagcagatgg ccatcagtgg 480
cggcttcatc cgcagggtaa caaatgatgc ccgagaaaat gaaatggatg aaaacctaga 540
gcaggtgagc ggcatcatcg ggaacctccg tcacatggcc ctggatatgg gcaatgagat 600
cgatacacag aatcgccaga tcgacaggat catggagaag gctgattcca acaaaaccag 660
aattgatgag gccaaccaac gtgcaacaaa gatgctggga agtggttaag tgtgcccacc 720
cgtgttctcc tccaaatgct gtcgggcaag atagctcctt catgcttttc tcatggtatt 780
atctagtagg tctgcacaca taacacacat cagtccaccc ccattgtgaa tgttgtcctg 840
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ttccaaaggt tgtacatagt ggt                                        923

<210> 44
<211> 206
<212> PRT
<213> Homo sapiens

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Arg Ala Asp Gln Leu Ala Asp Glu Ser Leu Glu Ser Thr Arg Arg Met
            20                  25                  30
Leu Gln Leu Val Glu Glu Ser Lys Asp Ala Gly Ile Arg Thr Leu Val
        35                  40                  45
Met Leu Asp Glu Gln Gly Glu Gln Leu Glu Arg Ile Glu Glu Gly Met
    50                  55                  60
Asp Gln Ile Asn Lys Asp Met Lys Glu Ala Glu Lys Asn Leu Thr Asp
65                  70                  75                  80
Leu Gly Lys Phe Cys Gly Leu Cys Val Cys Pro Cys Asn Lys Leu Lys
                85                  90                  95
Ser Ser Asp Ala Tyr Lys Lys Ala Trp Gly Asn Asn Gln Asp Gly Val
            100                 105                 110
Val Ala Ser Gln Pro Ala Arg Val Val Asp Glu Arg Glu Gln Met Ala
        115                 120                 125
Ile Ser Gly Gly Phe Ile Arg Arg Val Thr Asn Asp Ala Arg Glu Asn
    130                 135                 140
Glu Met Asp Glu Asn Leu Glu Gln Val Ser Gly Ile Ile Gly Asn Leu
145                 150                 155                 160
Arg His Met Ala Leu Asp Met Gly Asn Glu Ile Asp Thr Gln Asn Arg
                165                 170                 175
Gln Ile Asp Arg Ile Met Glu Lys Ala Asp Ser Asn Lys Thr Arg Ile
            180                 185                 190
Asp Glu Ala Asn Gln Arg Ala Thr Lys Met Leu Gly Ser Gly
        195                 200                 205


<210> 45
<211> 2088
<212> DNA
<213> Homo sapiens

<400> 45
catgaaggac cgaacccagg agctccgcac ggccaaggac agcgatgatg atgatgatgt 60
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tcgaggcttc attgacaaga tcgcagagaa cgtggaggag gtgaacggga agcacagtgc 180
catcctggca tcccccaacc ccgatgagaa gacgaaggag gagctggaag aactcatgtc 240
cgacataaag aagacagcaa acaaagttcg ttccaagtta aagagcatcg agcagtccat 300
cgagcaagag gaaggcctga accgctcctc cgctgacctg aggatccgga agacacagca 360
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ctaccgcgag cgctgcaaag gccgcatcca gaggcagctg gagatcaccg gcaggaccac 480
gaccagtgag gagctggagg acatgctgga gagtgggaac cccgccatct ttgcctctgg 540
gatcatcatg gactccagca tctcgaagca ggctctgagc gagattgaga cgcggcacag 600
tgagatcatc aagctggaga acagcatccg tgagctacac gacatgttca tggacatggc 660
catgctcgtg gagagccagg gagagatgat tgacaggatc gagtacaatg tggaacacgc 720
ggtagactat gtggagaggg ccgtgtctga caccaagaag gccgtcaagt accagagcaa 780
ggcgcgccgg aagaaaatca tgatcatcat ctgctgtgtg atcctgggca tcgtcatcgc 840
ctccactgtt gggggcatct tcgcctagaa gccaccccaaa ctgccactcc actccaggtg 900
ggccactcca aggaggccct ggctgctgcc acctggctgg gctgccctcc caaccccgc 960
ctctggctca gagcaccctc cctcccggcc cccatgctcc cttctctgcc atgggccctc 1020
cgtccccgcc ccgtgtcgtg tgcatgatct ctgtgagtgt gcgtctgtac gggaagaggc 1080
agagggaggc agccagcggg gcgtgatgca gtgtgcacag cgaggagcag acccaggcag 1140
ggccgccagg gtgacacagg ccacgcttcc ttgccttcag taactcggtg ggcccaggtt 1200
ctgctcttcc ctggggaccc taacctcgcc tccagctgac ctgccctgtc ctctccagct 1260
gtccccacaa gcagagccct gaggggtggg gaccagctgg ccacatggtg ctgcttttca 1320
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gggctaggtc tgaccccagg tgtccctctg gaaggggctg gctggtgccc tatttccagc 1560
caccccagca gctaggagag caaagcaggc tgcagtcagt ccctcaagcc agcgttgcat 1620
gtttgggatg gtggctcctg ttgtcttgcg ctctgggaag tcagatgtca tttcaggcct 1680
gcagtctcat cctgcccttg ccatcctccc atcgatgtgc cacgtgggtg tcacgtgtcc 1740
cagatgcagt attcggcagc cagccgggga gggctacctc ctcctcctca ccaccttggg 1800
gcttctcatg ggaaatgtgc ccccgcccca ggaccctctc ccttgtggac aggcagggag 1860
atgcatgcga gtgcatgcag caggggatgg ggccgtgtcc gtgtgcccca cctcccctcg 1920
gctttactcc tgcccagtga ctgtgaccac tgtccgtgtt gccttcttga acagcgattc 1980
cccccaaccc cttcaccaaa ggtcttggta caaccagctg cccatttttgt gaaatttta 2040
tgtagaataa acatttgtat ctgtaaaaaa aaaaaaaaaa aagcgttc              2088
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<210> 46
<211> 288
<212> PRT
<213> Homo sapiens

<400> 46

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Met Lys Asp Arg Thr Gln Glu Leu Arg Thr Ala Lys Asp Ser Asp Asp
 1               5                  10                  15
Asp Asp Asp Val Ala Val Thr Val Asp Arg Asp Arg Phe Met Asp Glu
            20                  25                  30
Phe Phe Glu Gln Val Glu Glu Ile Arg Gly Phe Ile Asp Lys Ile Ala
        35                  40                  45
Glu Asn Val Glu Glu Val Lys Arg Lys His Ser Ala Ile Leu Ala Ser
    50                  55                  60
Pro Asn Pro Asp Glu Lys Thr Lys Glu Glu Leu Glu Glu Leu Met Ser
65                  70                  75                  80
Asp Ile Lys Lys Thr Ala Asn Lys Val Arg Ser Lys Leu Lys Ser Ile
                85                  90                  95
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Glu Gln Ser Ile Glu Gln Glu Glu Gly Leu Asn Arg Ser Ser Ala Asp
            100                 105                 110
Leu Arg Ile Arg Lys Thr Gln His Ser Thr Leu Ser Arg Lys Phe Val
        115                 120                 125
Glu Val Met Ser Glu Tyr Asn Ala Thr Gln Ser Asp Tyr Arg Glu Arg
    130                 135                 140
Cys Lys Gly Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly Arg Thr Thr
145                 150                 155                 160
Thr Ser Glu Glu Leu Glu Asp Met Leu Glu Ser Gly Asn Pro Ala Ile
                165                 170                 175
Phe Ala Ser Gly Ile Ile Met Asp Ser Ser Ile Ser Lys Gln Ala Leu
            180                 185                 190
Ser Glu Ile Glu Thr Arg His Ser Glu Ile Ile Lys Leu Glu Asn Ser
        195                 200                 205
Ile Arg Glu Leu His Asp Met Phe Met Asp Met Ala Met Leu Val Glu
    210                 215                 220
Ser Gln Gly Glu Met Ile Asp Arg Ile Glu Tyr Asn Val Glu His Ala
225                 230                 235                 240
Val Asp Tyr Val Glu Arg Ala Val Ser Asp Thr Lys Lys Ala Val Lys
                245                 250                 255
Tyr Gln Ser Lys Ala Arg Arg Lys Lys Ile Met Ile Ile Ile Cys Cys
            260                 265                 270
Val Ile Leu Gly Ile Val Ile Ala Ser Thr Val Gly Gly Ile Phe Ala
        275                 280                 285
```